$sin\frac{α}{2}=\sqrt{\frac{1-\cos(α)}{2}}$

$\sin(\frac{α}{2}=)\sqrt{\frac{1+\cos(α)}{2}}$

tg$\frac{α}{2}=\sqrt{\frac{1-\cos(α)}{1+\cos(α)}}$ =$\frac{\sin(∝)}{1+\cos(∝)}$

 sin(x+y)=sinxcosy+cosxsiny sin(x-y)=sinxcosy-cosxsiny cos(x+y)=cosxcosy-sinxsiny cos(x-y)=cosxcosy+sinxsiny

sin2x+cos2x=1, sin2x=1-cos2x , cos2x =1- sin2x tgx·ctgx=1,

*a*

x=cos*a*

y=sin*a*

tg*a*=x/y=sin*a*/cos*a*

ctg*a*=y/x=cos*a*/sin*a*

y

x

M(x;y)